

THE CAMBRIDGE STATISTICS DISCUSSION GROUP

Monday 3rd February 2025 7:00 for 7:30

Please note earlier start time

Department of Applied Mathematics and Theoretical Physics,
Centre for Mathematical Sciences,
Wilberforce Road,
Cambridge, CB3 0WB

Building global resilience to high-impact volcanic eruptions

Lara Mani

Senior Research Associate

Centre for the Study of Existential Risk

Abstract: Our climate and natural environment is increasingly uncertain and extreme with an associated increase in the severity and number of catastrophic events. This talk looks at how we can collect and use data to gain an understanding in the mitigation and prevention of global catastrophic risks (GCRs) of one type of increasingly extreme natural event, namely volcanic eruptions. In particular we will look into risk communication to understand what communication methods, tools and messages work to increase awareness of extreme volcanic eruptions with policymakers, civil society, industry and publics. This research to date has adopted the use of novel methodologies, with a focus on participatory processes, including role-playing games and scenario-based exercises for increasing awareness of GCRs and for future explorations.

Speaker: Lara is a Senior Research Associate at the Centre for the Study of Existential Risk (CSER). Her research seeks to understand the efficacy of various communication methods and strategies for gaining traction for the mitigation and prevention of global catastrophic risks (GCRs). With a background in volcanic risk studies, Lara's research at CSER also explores the global catastrophic risks from volcanic eruptions and specifically the systemic risks they pose to humanity.

Lara gained her PhD in volcanic risk communication from the University of Plymouth, UK, where her research explored the use of video games for volcanic hazard education and outreach programmes. Most recently she has been working with partners at The University of the West Indies, Seismic Research Centre to evaluate the efficacy of the crisis communications campaign during the 2020-2021 eruption of La Soufriere, St Vincent.

Directions: The main entrance is reached from Clarkson Road by going along the footpath to the right of the Newton Institute, and turning left through the gatehouse towards the main building (Pavilion A), which has a glass front and a curved grassed roof. Coffee before the talk will be in the common room in Pavilion G, and the talk will be in Meeting Room 15 in Pavilion G. The main entrance is in the middle of the glass front. Free Parking is available after 5pm on Clarkson and Wilberforce Roads and by entering the site off Clarkson Road. Admittance may be difficult after 7:30.

Provisional Next Meetings:

3rd March - James Grime (Institute of Continuing Education) on 'Alan Turing and the Enigma Machine'

10th April - Roger Sewell on 'Predicting recurrence of prostate cancer: a Bayesian approach'.

7th October - Florian Markowetz (Cancer Research UK Cambridge Institute) on

'All models are wrong and yours are useless: making clinical prediction models impactful for patients'.

3rd November - Sam Gilbert (Bennett Institute of Public Policy) on 'Benefits of data openness in a digital world'.

'All models are wrong and yours are useless: making clinical prediction models impactful for patients'.
26th November - Riikka Hofmann (Faculty of Education) on '100 years of educational trials - no significant difference?'
3rd February 2026 - Nick Galwey (GlaxoSmithKline) on 'Connecting the False Discovery Rate to shrunk estimates'.
March - Mihaela van der Schaar (Cambridge Centre for AI in Medicine) on 'Revolutionising healthcare: AI-driven breakthroughs in medicine and healthcare delivery'.

Supper: Some members eat regularly in Wetherspoons (St Andrew's Street) before each meeting at **5-45pm**. Feel free to join them.

Subscriptions: of 1 pound are now due for attending the 2024-2025 session.

Secretary: Peter Watson, MRC Cognition and Brain Sciences Unit, 15 Chaucer Road, Cambridge CB2 7EF;
telephone 01223 769479; E-mail peter.watson@mrc-cbu.cam.ac.uk.

Slides and .mp3 files of old talks: <http://www.mrc-cbu.cam.ac.uk/people/peter.watson/csdg.html>